

1 Introduction

This report presents the integrated Feasibility Study and Environmental Impact Statement (FS/EIS) for BNSF's Former Maintenance and Fueling Facility located in Skykomish, Washington (site). Figure 1-1 shows the site boundary, which is not limited to BNSF's property. This integrated FS/EIS evaluates alternatives for cleanup action at the Skykomish Site.

In 1993, The Burlington Northern and Santa Fe Railway Company (BNSF) entered into an Agreed Order (No. DE91TC-N213) (1993 Agreed Order) with the Washington State Department of Ecology (Ecology) to conduct a Remedial Investigation and Feasibility Study (RI/FS) and to implement certain interim cleanup actions. BNSF and Ecology entered into a second Agreed Order in 2001 (No. DE 01TCPNR-2800) under which BNSF implemented additional interim actions.

Cleanup of the site is being done under the authority of Chapter 70.105D Revised Code of Washington (RCW), *Hazardous Waste Cleanup – Model Toxics Control Act* (MTCA), and its implementing regulations, Chapter 173-340 Washington Administrative Code (WAC), *The Model Toxics Control Act Cleanup Regulation*. This statute and its implementing regulations apply to the site in their entirety and govern all remedial actions at the site.

1.1 Purpose and Objectives

The purpose of a Feasibility Study (FS) is to proceed with cleanup of the site in accordance with the MTCA Cleanup Regulation, [Chapter 173-340 WAC]. An FS presents and evaluates alternatives for a cleanup and is used to enable a cleanup action to be selected for the site under WAC 173-340-360 through 173-340-390.

An Environmental Impact Study (EIS) is generally required when one or more of the alternatives in the FS will have probable, significant, adverse environmental impacts. The EIS analyzes the probable significant adverse environmental impacts of each reasonable alternative to clean up the site consistent with MTCA, and the reasonable measures that could reduce or mitigate those impacts (WAC 197-11-400). These impacts include short- and long-term impacts, direct and indirect impacts and cumulative impacts.

Under the State Environmental Policy Act (SEPA), if the lead agency determines that a project or proposal is likely to result in a significant adverse impact on the environment (i.e., Determination of Significance [DS]), then the process of preparing an EIS is initiated to evaluate potential associated impacts and consider various remedial alternatives. In September 2002, BNSF that Ecology issue a DS for the cleanup of the site. BNSF and Ecology agreed that the FS and EIS should be integrated into a single document

consistent with WAC 197-11-250 and 262. This FS/EIS is intended to improve decision-making and reduce duplication and paperwork related to selecting a final cleanup action.

Ecology has determined (WAC 197-11-430(2)) that a format integrating the presentation of alternatives and environmental analyses is encouraged under MTCA and allowed by SEPA. A Draft *Guide for the Integration of MTCA with SEPA* (Ecology, 2002a) was consulted for the preparation of this document.

The EIS process is used to analyze alternatives and possible mitigation measures to reduce the environmental impacts of the proposal. The process contains the following steps:

- 1) Scoping
- 2) Preparing the draft EIS
- 3) Issuing the draft EIS for public, tribe and agency review and comment
- 4) Preparing and issuing the final EIS
- 5) Using the EIS information in decision-making

Ecology issued a DS for the site on October 21, 2002. When preparing the EIS, Ecology is required to involve the public in what is known as “scoping,” or the process of determining the range of remedial alternatives, areas of impact, and possible mitigation measures that should be evaluated as part of the environmental impact statement. Scoping and community outreach activities have been performed by Ecology and BNSF during the recent site activities and investigations. These have included information sheets, meetings and presentations. During these meetings and presentations, public comment has been requested and obtained. This comment has helped to guide the RI/FS/EIS process. Further details are presented in Appendix A.

Figure 1-2 presents a general flow diagram of the MTCA process. This shows that the FS is one of several sequential requirements leading to site cleanup under MTCA. The FS uses data collected during the Remedial Investigation (RI) and additional data collected for the FS to develop and evaluate cleanup action alternatives. After the FS is complete, Ecology will issue a cleanup action plan (WAC 173-340-380); this plan will present the selected cleanup action(s) that will be used to address site contamination.

Figure 1-3 presents a diagram that summarizes the information presented in a Feasibility Study under MTCA. This information is presented in this FS/EIS

for the BNSF Skykomish site; however this FS/EIS also contains additional data that are required for an EIS under SEPA (WAC 173-802). As shown on Figure 1-3, an FS uses general facility information, and data collected from field investigations. Some of the key elements of this FS/EIS are described below.

- **Indicator Hazardous Substance (IHS).** IHSs are typically a subset of substances that contribute the majority of the overall threat to human health and the environment. These are used to define site cleanup requirements and are defined in the FS.
- **Conceptual Site Model (CSM).** The CSM provides the nature and extent of contamination, fate and transport characteristics of the IHSs, current and potential contaminant migration pathways and receptors of site contamination, and current and potential land use and resources. The CSM is intended to further refine the definition of risk posed by site contaminants and assist with the definition of cleanup requirements.
- **Cleanup Standards.** Cleanup standards are defined in an FS for all media, such as soil and groundwater, that have been impacted by contamination and that could pose a risk to human health or the environment. Cleanup standards consist of the cleanup levels for hazardous substances present at the site and the location where these cleanup levels must be met (point of compliance).
- **Cleanup Action Alternatives.** Cleanup action alternatives are developed and presented in the FS. These alternatives consist of technologies that clean up site contaminants by reuse or recycling, destruction or detoxification, immobilization or solidification, disposal, containment with engineering controls or institutional controls and monitoring. These cleanup action alternatives must meet the following MTCA requirements (WAC 173-340-360): (1) protect human health and the environment, (2) comply with cleanup standards and applicable federal and state laws, (3) provide for compliance monitoring, use permanent solutions to the maximum extent practicable, (4) provide for a reasonable restoration time frame, and (5) consider public concerns.
- **Remediation Levels.** Remediation levels are proposed in an FS, as required remediation levels always exceed cleanup levels and are concentrations of a hazardous substance above which a particular cleanup action component will be required as part of a cleanup action at a site. Remediation levels may be used at sites where a

combination of cleanup action components are used to achieve cleanup levels at the point of compliance.

The FS/EIS is intended to provide enough information to allow Ecology to select a cleanup action. The procedures for conducting a feasibility study are set forth in WAC 173-340-350(8). The selection of a final cleanup action is documented in the Cleanup Action Plan.